

What is Claimed Is:

1. A resistive material, comprising:

metallic powder containing copper, manganese, and aluminum;

glass powder and/or copper oxide powder; and

5 a vehicle.

2. The resistive material according to claim 1, wherein said metallic powder comprises 80 to 85 weight percent copper, 8 to 16 weight percent manganese, and 2 to 7 weight percent aluminum.

3. The resistive material according to either claim 1 or claim 2, wherein a maximum of
10 10 parts by weight of said glass powder and/or said copper oxide powder is included in the resistive material.

4. The resistive material according to any one of claims 1 through 3, wherein 10 to 15 parts by weight of said vehicle is included in the resistive material.

5. The resistive material according to any one of claims 1 through 4, wherein said
15 metallic powder is made by mixing copper powder, manganese powder, and aluminum powder.

6. The resistive material according to any one of claims 1 through 4, wherein said metallic powder is made of a copper-manganese-aluminum alloy powder.

7. The resistive material according to any one of claims 1 through 4, wherein said
20 metallic powder is made by mixing copper-manganese alloy powder and aluminum powder.

8. The resistive material according to any one of claims 1 through 4, wherein said metallic powder is made by mixing copper-aluminum alloy powder and manganese powder.

25 9. The resistive material according to any one of claims 1 through 4, wherein said

metallic powder is made by mixing manganese-aluminum alloy powder and copper powder.

10. A resistive element, including copper, manganese, and aluminum.

11. The resistive element according to claim 10, wherein said resistive element
5 comprises 80 to 85 weight percent copper, 8 to 16 weight percent manganese, and 2 to 7 weight percent aluminum.

12. A resistor, comprising:

an insulating substrate;

a resistive element containing copper, manganese, and aluminum formed on
10 said insulating substrate; and

a pair of electrodes connected to said resistive element.

13. The resistor according to claim 12, wherein a conductive component contained in said resistive element comprises 80 to 85 weight percent copper, 8 to 16 weight percent manganese, and 2 to 7 weight percent aluminum.

14. The resistor according to either claim 12 or claim 13, wherein copper is used for
15 said electrodes.

15. The resistor according to any one of claims 12 to 14, wherein temperature coefficient of resistance is between $-100 \times 10^{-6}/K$ and $100 \times 10^{-6}/K$.

16. The resistor according to any one of claims 12 to 14, wherein thermo-electromotive
20 force is between $-5 \mu V/K$ and $5 \mu V/K$.

17. A resistor manufacturing method, comprising the steps of:

printing a resistive material containing copper, manganese, and aluminum
onto an insulating substrate; and

sintering said resistive material in a nitrogen atmosphere, thereby providing a
25 resistive element.

18. The resistor manufacturing method according to claim 17, further comprising the steps of:

printing a conductive material containing copper as a main component onto said insulating substrate; and

5 sintering said conductive material in a nitrogen atmosphere, thereby providing electrodes.